

EXAMINER INTERVIEW SUMMARY

Applicant appreciates Examiner Lashley's courtesy in granting a telephonic interview on April 16, 2008. Applicant's representative, Shane A. Kennedy, and Examiner Lashley discussed the novel features of the claims and how the cited references do not disclose these features. Applicant's representative agreed to amend claims rejected under 35 U.S.C. § 101, and to present argument rebutting the antecedent basis rejections under 35 U.S.C. § 112.

REMARKS

Applicant has carefully reviewed and considered the Office Action mailed on August 21, 2007, and the references cited therewith.

Claims 1, 6, 8-10, 12, 14-17, 33, and 39-40 are amended, and claims 2-3, 7, 11, 13, 18, 20, 23, and 26-29 are canceled; as a result, claims 1, 4-6, 8-10, 12, 14-17, 19, 21-22, 24-25, and 30-43 are now pending in this Application, of which claims 1, 12, 17, and 36 are independent.

Claim 1, 6, 8-10, and 33 have been amended to recite that the “object” is an “object to be inspected.” These amendments finds support, for example, on page 22, line 11, page 23, line 7, and on page 24, line 7 of the specification.

Claims 12, 14-17, and 39-40 have been amended to recite “computer storage medium” instead of “computer-readable medium.” These amendments find support, for example, on page 11, lines 15-16 of the specification.

CLAIM OBJECTIONS

Claim 1 was objected to due to the recitation of “an/the object,” and the later recitation of “objects.” Applicant respectfully submits that the amendment to recite, “object to be inspected,” sufficiently distinguishes the “object to be inspected” from the “objects that have previously been scanned.” Accordingly, Applicant respectfully requests that the objection to claim 1 be withdrawn.

§ 101 REJECTIONS

Claims 12, 14-17, 19, 21-22, 24-25, 34-35, and 39-42 were rejected under 35 U.S.C. § 101 on the ground that the recitation of “computer-readable medium” included data signals and/or carrier waves. Applicant has amended claims 12, 14-17, and 39-40 to recite “computer storage medium,” which does not include data signals or carrier waves, instead of “computer-readable medium.” Accordingly, Applicant respectfully requests that the rejections of 12, 14-17, and 39-40 be withdrawn. Applicant further requests that the rejections of claims 19, 21-22, 24-25, 34-35, and 41-42, which depend on claim 17, be withdrawn.

§ 112 REJECTIONS

Claims 1, 4-6, 8-10, 12, 14-17, 19, 21-22, 24-25, and 30-43 were rejected under 35 U.S.C. § 112, second paragraph, as being indefinite. The Office Action dated February 26, 2008, rejected these claims as being indefinite due to the recitations in claims 1, 19, and 30 of “a second set of {hash values}” without a previous recitation of a first set of {hash values}, and the recitation of “a third {hash value}” and “a fourth set of {hash values}” without a previous recitation of a second {hash value} and a third set of {hash values}. The Office Action asserts that the claims are indefinite due to lack of antecedent basis.

Examiners should allow claims which define the patentable subject matter with a reasonable degree of particularity and distinctness. MPEP § 2173.02. The focus is whether the claims meets the threshold requirements for clarity and precision, not whether more suitable language or modes of expression are available. Id. A claim term lacks antecedent basis if the claim recites “said {device}” or “the {device}” with no earlier recitation of the {device}. See MPEP § 2173.05(e). However, this section of the MPEP, which describes antecedent basis rejections, does not require that similar claim terms (such as hash values or sets of hash values) use sequential numbers to distinguish them. Applicant respectfully submits the recitation in claim 1 of “a first hash value” and “a third hash value” is sufficiently clear to distinguish the “first hash value” from the “third hash value.” Similarly, Applicant respectfully submits that the recitation in claim 1 of “a second set of hash values” and “a fourth set of hash values” is sufficiently clear to distinguish the “second set of hash values” from the “fourth set of hash values.” Accordingly, Applicant respectfully submits that claim 1 is sufficiently definite to meet the requirements of 35 U.S.C. § 112, second paragraph, and respectfully requests that this rejection of claim 1 be withdrawn. Applicant further requests that the rejections of claims 4-6, 8-10, 12, 14-17, 19, 21-22, 24-25, and 30-43 be withdrawn for the reasons described above with reference to claim 1.

Claims 4, 5, 14, 15, 21, 24, 36, and 37-43 were rejected under 35 U.S.C. § 112, second paragraph. The Office Action dated February 26, 2008, asserts that these claims are incomplete for omitting essential elements because the claims omit the steps required to perform a “rough outline hash value” and a “sophisticated signature hash value.”

Applicant reiterates that the specification, on page 20, lines 9-14, describes *examples* of how to produce a rough outline hash value (ROHV): “The ROHV is typically determined based on a simple technique that only requires a simple computation. For example, the ROHV of an object may be determined from a hash value (such as an XOR) hash of the first few bytes or any portion of a file. The ROHV may also be determined using simple parameters like the object size and the like. The ROHV enables message tracker 527 to roughly distinguish one object from other objects.” However the specification does not describe these examples as “essential” or the only way to produce a ROHV.

Similarly, the specification, on page 20, lines 16-20, describes *examples* of how to produce a sophisticated signature hash value (SSHV): “An SSHV is typically determined based on a sophisticated hash function, such as Message Digest -5 (MD-5), Secure Hash Algorithm (SHA), Secure Hash Standard, and the like. The values may also be determined based on a public key certificate, a digital signature, a checksum function, or similar algorithmic mechanism that provides a value that distinguishes one object from other objects.” Again, the specification does not describe these examples as “essential” or the only way to produce a SSHV.

MPEP § 2172.01 provides that “[a] claim which fails to interrelate *essential* elements of the invention as defined by applicant(s) in the specification may be rejected under 35 U.S.C. 112, second paragraph, for failure to point out and distinctly claim the invention” (emphasis added). As discussed above, the specification does not describe the steps for performing the ROHV or SSHV as “essential.” Therefore, Applicant respectfully requests that the rejections of claims 4, 5, 14, 15, 21, 24, and 36-43 be withdrawn.

§ 103 REJECTIONS

Claims 1, 6, 8-10, 12, 14-17, 19, 21-22, 24-25, and 30-43 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Chen et al., U.S. Patent No. 5,960,170, in view of Touboul, U.S. Patent No. 6,804,780. Applicant respectfully submits that no proper combination of Chen and Touboul renders the elements of these claims obvious.

Applicant respectfully submits that no motivation has been shown for combining Chen and Touboul, and respectfully requests that the rejections of claims 1 and 36 be withdrawn. Applicant further requests that the rejections of claims 4-6, 8-10, 30-33, and 37-38 be withdrawn at least due to their dependence on claim 1. Applicant further requests that the rejection of claim 43 be withdrawn at least due to its dependence on claim 36.

Claim 6 recites, “immediately processing the object further comprises forwarding the object to be inspected to an output component without scanning the object to be inspected.” Based on claim 1, upon which claim 6 depends, the respective hash values of the “object to be inspected” have been determined to match the respective sets of hash values. The Office Action asserts that “immediately processing the object further comprises forwarding the object to an output component without scanning the object, where the object is not scanned for virus C or any viruses whose signatures portions being searched for were not found.” However, column 13, line 57 through column 14, line 31 of Chen discloses scanning files for strings A2 and B2 after determining that they included string A1 or B1 (or both). Thus, in Chen, a file which is determined to include string A1 or B1 (or both) but not C1 is still scanned for A2 and B2. Therefore, Chen does not disclose “forwarding the object...without scanning the object,” as recited in claim 6. Touboul does not compensate for these deficiencies. Accordingly, all of the elements of claim 6 have not been shown, and Applicant respectfully requests that the rejection of claim 6 be withdrawn for this additional reason.

Claims 9 and 10 recite, “updating the {second or fourth} set of hash values to include the {first or third} hash value,” based on a hash value of the object to be inspected not matching any of the hash values in a set of hash values and scanning the object to be inspected for an exploit. The Office Action asserted that Chen discloses updating a set of hash values because A1, A2, A3 includes A1, and because B1, B2, B3 includes B1. However, while Chen discloses scanning files to determine whether they include certain strings, Chen does not disclose scanning the file

for an exploit if the strings are not found in the file. Chen also does not disclose updating the set of strings if the strings are not found in the file. Touboul does not compensate for these deficiencies. Accordingly, all of the elements of claims 9 and 10 have not been shown, and Applicant respectfully requests that the rejections of claims 9 and 10 be withdrawn for this additional reason.

Applicant respectfully submits that no motivation has been shown for combining Chen and Touboul, and respectfully requests that the rejection of claim 12 be withdrawn. Applicant further requests that the rejections of claims 14-16 and 39-40 be withdrawn at least due to their dependence on claim 12.

Applicant respectfully submits that no motivation has been shown for combining Chen and Touboul, and respectfully requests that the rejection of claims 17 be withdrawn. Applicant further requests that the rejections of claims 19, 21-22, 24-25, and 41-42 be withdrawn at least due to their dependence on claim 17.

Claims 37, 39, and 41 recite that the first hash value includes a rough outline hash value determined “based on a hash value of a first portion of the object.” Applicant respectfully submits that while Chen may be interpreted as disclosing portions or strings of viruses, and Touboul may be interpreted as disclosing hash values, using hash values of portions of the objects was not obvious in light of Chen and Touboul. Applicant respectfully submits that Chen and Touboul did not provide any motivation for using hash values of portions of objects. Accordingly, Applicant respectfully requests that the rejections of claims 37, 39, and 41 be withdrawn for this additional reason.

Claims 38, 40, and 42 recite, “a Message Digest-5, a Secure Hash Algorithm, or a Secure Hash Standard.” Applicant respectfully submits that neither Chen nor Touboul discloses a Message Digest-5, a Secure Hash Algorithm, or a Secure Hash Standard. Accordingly, all of the elements of claims 38, 40, and 42 have not been shown, and Applicant respectfully requests that the rejections of these claims be withdrawn for this additional reason.

Applicant further requests that the rejection of claim 43 be withdrawn for the reasons described above with respect to claims 37, 39, and 41, and claims 38, 40, and 42.

CONCLUSION

Applicant respectfully submits that the claims are in condition for allowance and notification to that effect is earnestly requested. The Examiner is invited to telephone Applicant's attorney (208-286-1013) to facilitate prosecution of this application.

If necessary, please charge any additional fees or credit overpayment to Deposit Account No. 50-3521

Respectfully submitted,

Brake Hughes Bellermann LLP
Customer Number: 53666
208-286-1013

Date May 26, 2008

By /Shane A. Kennedy/
Shane A. Kennedy
Reg. No. 54,760